

ABSTRACT OF THE DISCLOSURE

In a synchronous motor control device that corrects a deviation in rotational position which is related to a rotational position detector for a synchronous motor on which vector-control is performed, the synchronous motor control device includes: a current instruction generator that disables a torque instruction to set d-axis and q-axis current instructions as zero when a phase correction instruction is inputted; a current controller that outputs d-axis and q-axis voltage instructions based on the d-axis and q-axis current instructions; a phase correction quantity detector for determining the amount of offset in which the d-axis voltage instruction becomes zero when the phase correction instruction is inputted and the d-axis voltage instruction is not zero; an adder for adding a rotor positional angle and the amount of offset; and a voltage converter for determining three-phase voltage instructions based on the additional value, the d-axis and q-axis voltage instructions.